CLAIMS

What is claimed:

SUB A1

1. A system for clearing data residing in a memory region, comprising:

a controller; and

a memory coupled to said controller having said memory region subdivided into a plurality of sub-regions, each said sub-region comprising a plurality of storage elements wherein said controller is designed to write clear data concurrently to each one of said plurality of sub-regions.

2. The system of claim 1, wherein said memory region is subdivided into four sub-regions.

3. The system of claim 1, wherein said memory region is subdivided into consecutive and adjacent sub-regions.

4. The system of claim 1, wherein said memory region is subdivided into sub-regions that are of equal dimension.

5. The system of claim 1, wherein said memory region is subdivided into sub-regions that vary in dimension.

6. The system of claim 1, wherein said clear data corresponds to a predefined color of a pixel.

7. The system of claim 1, wherein said memory is a frame buffer associated with a graphics display device.

8. The system of claim 1, wherein said controller is a frame buffer controller.

9. The system of claim 1, wherein said plurality of sub-regions are individually identified by location in said memory by a pointer register.

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10. The system of claim 1, further comprising a processor configured to determine the location of said memory region.

11. The system of claim 10, wherein said processor transmits a single clear command to said controller, wherein said controller is prompted to clear each one of said plurality of sub-regions.

12. The system of claim 10, wherein said processor transmits a plurality of clear commands to said controller, wherein each one of said clear commands corresponds to one of each said plurality of sub-regions.

13. The system of claim 10, wherein said processor determines the location of said memory region based upon a dimension and a position of an at least one image to be written to a graphics display device.

14. The system of claim 10, wherein said processor determines the location of a plurality of memory regions based upon a dimension and a position of a plurality of images, such that one of each said plurality of memory regions corresponds to one of said plurality of views.

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15. A method for writing clear data to a frame buffer of a graphics display device, comprising the steps of:

determining a dimension and a position of at least one image displayed on said graphics display device, wherein said at least one image is to be cleared;

determining a location of a region of memory where a plurality of data having at least pixel information associated with a plurality of pixels which display said at least one image is stored;

subdividing said memory region into a plurality of sub-regions; and

writing said clear data concurrently to each of said plurality of sub-regions.

16. The method of claim 15, further comprising the step of issuing one clear command which initiates said step of writing.

17. The method of claim 15, further comprising the step of issuing a plurality of clear commands, wherein each one of said clear commands corresponds to one of each said plurality of sub-regions, and wherein the step of issuing said plurality of clear commands initiates said step of writing.

18. The method of claim 15, further comprising the step of associating a plurality of location identifiers, wherein one location identifier is associated with each one of said plurality of sub-regions residing in said frame buffer, and wherein said step of concurrently writing clear data begins at said plurality of sub-regions identified by said plurality of corresponding location identifiers.

19. The method of claim 15, further comprising the step of determining said dimension and said position for each one of a plurality of images, and repeating the steps of determining a location and subdividing for each one of said plurality of images.

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20. A computer readable medium having a program for clearing data residing in a memory region, the program comprising logic configured to perform the steps of:

determining a dimension and a position of at least one image displayed on a video display device, wherein said at least one image is to be cleared;

determining a location of said memory region where a plurality of data having at least pixel information associated with a plurality of pixels which display said at least one image is stored;

subdividing said memory region into a plurality of sub-regions; and

writing said clear data concurrently to each of said plurality of sub-regions.

21. A system for clearing data residing in a memory region, comprising:

means for determining a dimension and a position of at least one image displayed on said graphics display device, wherein said at least one image is to be cleared;

means for determining a location of a region of memory where a plurality of data having at least pixel information associated with a plurality of pixels which display said at least one image is stored;

means for subdividing said memory region into a plurality of sub-regions; and

means for writing said clear data concurrently to each of said plurality of sub-regions.

22. The system of claim 21, further comprising means for associating a plurality of location identifiers, wherein one location identifier is associated with each one of said plurality of sub-regions residing in said frame buffer, and wherein said means for concurrently writing clear data begins at said plurality of sub-regions identified by said plurality of corresponding location identifiers.

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23. The system of claim 22, further comprising means for determining said dimension and said position for each one of a plurality of images, and wherein said means of determining a location and said means for subdividing said memory region operates on each one of said plurality of images.